

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be consulted
for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)
Bonide Rose and Flower Spray or Dust

ID NO: 459
Date: November 8, 1998

Section I

Bonide Products, Inc.
2 Wurz Ave.
Yorkville, NY 13495

(800) 424-9300
(315) 736-8231

Section II - Hazardous Ingredients/Identity

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
Methoxychlor CAS#72-48-5				6.0
Captaun CAS#133-06-2				6.0
Malathion CAS#121-75-5				3.0
Carbaryl (Sevin) CAS#63-25-2				0.5

Section II - Fire and Explosion Data

FLASH POINT (Method Used): N.A.

FLAMMABILITY: May burn upon exposure to flame.

FIRE FIGHTING COMMENTS: Backpacks and protective gear required. Avoid use of water to reduce contamination hazard
UNUSUAL FIRE/EXPLOSION HAZARD: None

Section III - Spill or Leak Procedures

PRECAUTIONS: Avoid contact with spilled material

Section IV - Storage and Handling

STORAGE: Store in a cool, dry place. Keep out of reach of children

HANDLING PRECAUTIONS: Avoid inhalation of dust or spray. Avoid contact with eyes, skin, or clothing. Wash skin and clothing after handling. CONTAINER DISPOSAL: Wrap empty container and place in trash.

Section V - Health Hazard Data

PRECAUTIONS: Harmful if swallowed or inhaled. May be absorbed through skin.

FIRST AID: If swallowed: Consult a physician. If on Skin: Remove contaminated clothing and wash skin with soap and water. Call a Physician. If in Eyes: Flush with plenty of water. Get medical attention if irritation persists
NOTE TO PHYSICIAN: Atropine is antidotal if symptoms of cholin-esterase inhibition appear.

Section VI - Additional Information/Hazards:

This product is toxic to fish. Do not contaminate water with this product.

NOTICE: This information is believed to be accurate and reliable. However, no guarantee expressed or implied is made with respect to the information contained herein.

KEEP OUT OF REACH OF CHILDREN

ABBREVIATION KEY

N/A: NOT AVAILABLE OR APPLICABLE
TLV: THRESHOLD LIMIT VALUE
STEL: SHORT TERM EXPOSURE LIMIT

N/E: NOT ESTABLISHED
TWA: TIME WEIGHTED AVG./8 HOUR WORKDAY
D.O.T.: DEPARTMENT OF TRANSPORTATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

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IDENTITY (As Used on Label and List)

Bonide Rose & Garden Insect Spray

ID No. 4388

Date: November 30, 1998

Section I

Bonide Products, Inc.
2 Wurz Ave
Yorkville, NY 13495

(800) 424-9300
(315) 736-8231

Section II - Hazardous Ingredients/Identity

Hazardous Components (Specific Chemical Identity - Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
Pyrethrins CAS No. 8003-34-4				0.05
Peroponyl Butoxide, Technical CAS No. 51-03-6				0.500
Isobutane CAS No 75-28-5				>25

Section III - Physical/Chemical Ingredients

PHYSICAL STATE: Liquid SPECIFIC GRAVITY: 0.805 pH: Neutral
APPEARANCE: Milky white to yellow liquid. VAPOR PRESSURE (psig): 45

Section IV - Fire and Explosion Data

FLASHPOINT: NA FIRE AND EXPLOSION HAZARDS: Contents under pressure. Do not puncture. Do not store near heat or open flame. Exposure to temperature above 130 F may cause bursting. Do not throw container into fire or incinerator. EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam or water.
FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear.

Section V - Reactivity Data

STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not occur

Section VI - Health Hazard Information

EMERGENCY OVERVIEW: A milky white to light yellow liquid that is: 1) Toxic to fish; 2) Under pressure. Do not use or store near heat or flame. PRIMARY ROUTES OF ENTRY: Inhalation and skin contact. POTENTIAL HEALTH EFFECTS: EYES: May cause slight eye irritation. SKIN: May cause slight skin irritation. INHALATION: May cause dizziness and lightheadedness. SIGNS AND SYMPTOMS: May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long-lasting effects.

FIRST AID MEASURES: EYES: Flush with water. SKIN: Wash thoroughly with soap and water.
INHALATION: Remove victim to fresh air.

Section VII - Precautions for Safe Handling/Use

HANDLING PRECAUTIONS: -Keep out of reach of children -Avoid breathing spray
-Avoid contact with eyes and skin -Do not contaminate feed or foodstuffs

STORAGE PRECAUTIONS: Do not store below 23 F.

WORK/HYGIENIC PRACTICES: Wash thoroughly with soap and water after use.

EXPOSURE CONTROLS/PERSONAL PROTECTION: ENGINEERING CONTROLS: Use in well-ventilated area. EYE/FACE PROTECTION: Safety glasses. SKIN PROTECTION: Chemical resistant gloves.

Section VIII - Environmental and Disposal Information

ACCIDENTAL RELEASE MEASURES: Soak up with an absorbent material and dispose of in trash. **OTHER ENVIRONMENTAL INFORMATION:** This product is toxic to fish. Do not use near fishbowls or aquaria. Do not apply directly to water. **DISPOSAL CONSIDERATIONS:** Do not incinerate. Wrap container and put in trash collection.

Section IX - Regulatory Information**SARA TITLE III NOTIFICATIONS AND INFORMATION****SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION**

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

CAS No 51-03-6 **INGREDIENT NAME** Piperonyl butoxide **PERCENT BY WEIGHT** = 0.5

This information must be included on all MSDSs that are copied and distributed for this material.

REGULATED INGREDIENTS:

INGREDIENT: Pyrethrins **CAS No:** 8003-34-7 **PERCENT BY WEIGHT:** 0.05

REGULATIONS: Illinois Toxic Substance New Jersey Workplace Hazardous Substance

Pennsylvania Environmental Hazardous Substance Pennsylvania Workplace Hazardous Substance

INGREDIENT: Piperonyl butoxide **CAS No:** 51-03-6 **PERCENT BY WEIGHT:** 0.5

REGULATIONS: SARA Section 313 Toxic Chemical

INGREDIENT: Isobutane **CAS No:** 75-28-5 **PERCENT BY WEIGHT:** >25

REGULATIONS: Massachusetts Hazardous Substance New Jersey Environmental Hazardous Substance

New Jersey Workplace Hazardous Substance Pennsylvania Workplace Hazardous Substance

Section X - Toxicological Information

ACUTE STUDIES: No acute toxicity data is available for this formulation.

CHRONIC (CANCER INFORMATION): In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high doses exposures to pyrethrum. Marginally higher incidences of benign liver tumors in mice were observed in mice following lifetime high dose exposures to piperonyl butoxide. The significance of these observations is questionable and under review. The doses at which tumors were observed for both pyrethrum and piperonyl butoxide greatly exceeded potential human exposure from labeled uses.

CARCINOGENICITY: NTP: No IARC: No OSHA: No

TERATOGENICITY (Birth Defects): There were no birth defects or adverse effects on reproductive parameters in tests with rats and rabbits for either pyrethrum or piperonyl butoxide. They are not considered to be teratogenic.

MUTAGENICITY (Genetic Effects): Pyrethrum was not found to be genotoxic and did not damage DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovaries (CHO) cells, and in cultured human liver cells).

PBO was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

Section XI - Other Information

TRANSPORT INFORMATION: **PROPER SHIPPING NAME:** Aerosols, nonflammable

HAZARD CLASS: 2.2 **DOT IDENTIFICATION NUMBER:** UN1950

DOT SHIPPING LABEL: Nonflammable Gas

HMIS HAZARD RATING: Health: 1 Slight **NFPA HAZARD RATING:** Health: 1 Slight

Fire: 1 Slight Fire: 1 Slight Reactivity: 0 Negligible

Reactivity: 0 Negligible Protection: B Special: -

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